February 15, 2002

William Solt
Stanrail Corporation
1225 Martin Luther King Drive
Gary, IN 46402

Re: Registered Construction and Operation Status,
089-15138-00167

Dear Mr. Solt:

The application from Stanrail Corporation, received on December 10, 2001, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following, to be located at 201 Mississippi Street, in Gary, Indiana, 46402, is classified as registered:

(a) One (1) metal boxcar parts surface coating line, identified as Line 6, applying extreme performance coatings with a maximum production rate of 5 units per hour, with PM/PM10 emissions controlled by a dry filter system, and emissions exhausted through the Line 6 Stack.
(b) Five (5) natural gas fired emission units, including four (4) space heaters, and one (1) air make-up unit, with a combined rated capacity of 1.6 MMBtu/hr.

The following conditions shall be applicable:

(1) Annual Emission Statement [326 IAC 2-6]
The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4.

The annual emission statement shall:

(a) indicate the actual emissions of all criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(b) cover the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Local Agency
504 North Broadway, Suite 1012
Gary, Indiana 46402

(c) be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Gary Local Agency on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

(2) Opacity Limitations [326 IAC 5-1-2]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4, unless otherwise specified in 326 IAC 6-1-10.1.
(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

(3) Coating Line Overspray PM Limitations [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from coating line 6 shall not exceed the limits established utilizing the following equation:

$E = 4.10 * P^{0.67}$

where: E = rate of emission in pounds per hour,
P = process weight in tons per hour

(4) Coating VOC Content Limits [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, the owner or operator shall limit the volatile organic compound (VOC) content of the coatings applied at coating booth 6 (extreme performance coatings) to three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

For the purposes of this Condition, extreme performance coatings are defined as coatings that are designed for exposure to temperatures consistently above ninety-five degrees Celsius (95° C), detergents, abrasive or scouring agents, solvents, corrosive atmospheres, outdoor weather at all times, or similar environmental conditions.

To demonstrate compliance with the limit of this Condition on a continuous basis, the owner or operator shall prepare and maintain copies of each coating's MSDS sheets and worst case "as supplied" and "as applied" VOC data sheets, making them available to the Office of Air Quality upon request. Said records shall be maintained for a minimum period of five (5) years.

(5) Coating Line Color Change and Cleanup Requirements [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9, all solvents sprayed from the application equipment of the paint booth during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that minimizes evaporation.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

SDF

cc: File - Lake County
Lake County Health Department
Air Compliance - Ramesh Tejuja
Gary Local Agency
Northwest Regional Office
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Registration
Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3).

Company Name:	**Stanrail Corporation**
Address:	**201 Mississippi Street**
City:	**Gary**
Authorized individual:	
Phone #:	
Registration #:	**089-15138-00167**

I hereby certify that surface coating line 6 is still in operation and is in compliance with the requirements of Registration 089-15138-00167.

Name (typed):
Title:
Signature:
Date:

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Stanrail Corporation
Source Location:	201 Mississippi Street, Gary, Indiana 46402
County:	Lake
SIC Code:	3744
Registration No.:	089-15138-00167
Permit Reviewer:	SDF

The Office of Air Quality (OAQ) has reviewed an application from Stanrail Corporation relating to the construction and operation of a new railroad steel boxcar door surface coating line.

Request

On December 10, 2001, Stanrail Corporation submitted an application to permit a new coating line, identified as Line 6, at a building located at 201 Mississippi Street in Gary, Indiana 46402 which is approximately one mile from the location of their existing Part 70 source.

The proposed coating line will be coating metal railroad boxcar doors that do not come from and do not go to their existing Title V source. In addition, no personnel or resources shall be transferred between the two sources.

The proposed coating line will be located at a building that is owned by Wheeling Corrugating Company. Wheeling Corrugating manufactures and coats corrugated metal that is used to produce steel buildings. Stanrail will be renting the building from Wheeling Corrugating and will be coating parts related to their Title V source. The parts coated by Stanrail Corporation are in no way related to the products produced by Wheeling Corrugating.

Therefore, the proposed coating line will not be considered part of the Wheeling Corrugating Company operation and will be permitted separate from the Wheeling Corrugating Company permit.

However, pursuant to 326 IAC 1-2-73, a source is defined as an aggregation of one (1) or more stationary emissions units that are located on one (1) piece of property or on contiguous or adjacent properties, are owned by the same person (or by persons under common control), and belong to a single major industrial grouping. For purposes of defining a source, two (2) or more contiguous or adjacent properties shall be considered part of a single major source grouping if all of the pollutant emitting activities at such contiguous or adjacent properties belong to the same major group, that is, all have the same two (2) digit Standard Industrial Classification (SIC) code as described in the Standard Industrial Classification Manual, 1987. Any stationary source (or group of stationary sources) that supports another source, where both are under common control of the same person (or persons under common control) and are located on contiguous or adjacent properties, shall be considered a support facility and part of the same source regardless of the two (2) digit SIC code for that support facility. A stationary source (or group of stationary sources) is considered a support facility to a source if at least fifty percent (50%) of the output of the support facility is dedicated to the source. A source does not include mobile sources, nonroad engines, or nonroad vehicles."

Even though the two plants are only 1 mile apart, the source operates under common ownership and control, and have the same SIC code, these sources operate independently of each other, each producing their own products and not functioning significantly as support facilities for each other. No personnel or products will be shifted between the existing and proposed plants.

Therefore, the proposed source shall be permitted independent of the existing source. Based on the estimated unrestricted potential to emit (UPTE) of 13.60 tons VOC/yr and 18.65 tons PM(PM10)/yr the proposed coating line shall be permitted via a registration pursuant to 326 IAC 2-5.5-1(b)(1)(A) and (C) which states that sources with PM or PM10 potential to emit greater than 5 tons per year but less than 25 tons per year and VOC emissions greater than 10 tons per year but less than 25 tons per year, shall be permitted via a registration.

Existing Approvals

This proposed permit is the first approval for the source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that this Registration be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted on January 14, 2002.

Emission Calculations

UNRESTRICTED POTENTIAL TO EMIT DUE TO THE MODIFICATION:

The emissions generated by the proposed surface coating operation are VOC's, PM, and PM10. The following calculations determine the unrestricted potential to emit from the proposed surface coating operation.

Paint Booth:

The following calculations determine the PM, PM10, and VOC UPTE based on use of the worst case coating, the respective maximum gal/unit, the maximum units/hr, the chemical properties of the coatings as obtained from the MSDS, emissions before controls, and 8760 hours of operation.

VOC: VOC (lb/day) = lb/gal * fraction VOC * gal/unit * unit/hr * 24 hr/day
VOC (tons/yr) = lb/gal * fraction VOC * gal/unit * unit/hr * 8760 hr/yr * 1/2000 ton/lb

Coating	lb/gal	fraction VOC	maximum gal/unit	maximum unit/hr	VOC(lb/day)	VOC (ton/yr)
304R3	9.76	0.1273	0.50	5	74.54	13.60

PM: PM (tons/yr) = lb/gal * gal/unit * unit/hr * (1 - wt% VOC) * (1 - 0.80) * 8760 hr/yr * 1/2000

Coating	lb/gal	maximum gal/unit	maximum unit/hr	Fraction VOC	fraction transferred	PM* (ton/yr)
304R3	9.76	0.50	5	0.1273	0.80	18.65

* PM10 is determined to be equal to PM.

4 Natural Gas Space Heaters + 1 Air Make Up Unit:

The following calculations determine the space heater and air make-up unit emissions based on natural gas combustion, a combined maximum capacity of 1.6 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

1.6 MMBtu/hr * 8760 hr/yr * 1 E6 Btu/MMBtu * 1/1000 cf/Btu * 1/1E6 MMcf/cf * Ef lb poll/MMcf * 1/2000 ton poll/lb poll = ton poll/yr

	PM 7.6 lb/MMcf	PM10 7.6 lb/MMcf	SO2 0.6 lb/MMcf	NOx 100 lb/MMcf	VOC 5.5 lb/MMcf	CO 84 lb/MMcf
ton/yr	neg.	0.10	neg.	0.70	neg.	0.60

EMISSIONS AFTER CONTROLS:

The only emissions controlled are the paint booth PM/PM10 emissions. The emissions are controlled by a dry filter system with a design control of 97%.

The following calculations determine the emissions after controls from the paint booth based on the emissions before controls, a design control efficiency of 97%, and 8760 hours of operation.

PM/PM10 Emissions Before Controls (tons/yr) * (1 - 0.97) = tons (PM/PM10)/yr

Coating	PM* Emissions Before Controls (ton/yr)	Control Efficiency	PM Emissions After Controls (tons/yr)
304R3	18.65	0.97	0.56

* PM10 is determined to be equal to PM.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls due to the proposed source based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	18.65
PM-10	18.65
SO_2	neg.
VOC	13.60
CO	0.60
NO_x	0.70

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Pollutant	Potential To Emit (tons/year)
Single HAP	neg.
Total Combined HAPs	neg.

The PM and PM10 PTE, each, are greater than 5 tons per year, but less than 25 tons per year, and the VOC PTE is greater than 10 tons per year, but less than 25 tons per year. Therefore, the source qualifies for a Registration pursuant to 326 IAC 2-5.5-1(b)(1)(A) and (C).

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM_{10}	Moderate Non-attainment
SO_2	Primary Non-Attainment
NO_2	Attainment or Unclassifiable
Ozone	Severe Non-attainment
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe non-attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Lake County has been classified as attainment or unclassifiable for NOx, CO, and lead, moderate non-attainment for PM10 and primary non-attainment for SO2. Therefore, the NOx, CO, and lead emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21 and the PM10 and SO2 emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3.

(c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

	Source Potential to Emit After Controls (tons/year)						
Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Surface Coating Operation	0.56	0.56	-	-	13.60	-	-
Combustion Units	neg.	0.10	neg.	0.70	neg.	0.60	neg.
Total	**0.56**	**0.66**	**neg.**	**0.70**	**13.60**	**0.60**	**neg.**

PSD Major Source Levels	250	250	250	250	250	250	-
Part 70 Major Source Levels	-	100	100	100	100	100	10/25

(a) This new source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.

(b) This new source is not a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

Federal Rule Applicability

New Source Performance Standards (NSPS):

There are no New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) that apply to the proposed source.

National Emission Standards for Hazardous Air Pollutants (NESHAPs):

There are no National Emission Standards for Hazardous Air Pollutants (326 IAC 14 and 20 and 40 CFR Part 61 and 63) that apply to this proposed source.

State Rule Applicability

Entire State Rule Applicability:

326 IAC 1-6-3 (Preventive Maintenance Plan):

The proposed source is not required to have a preventive maintenance plan for the emission units and control devices of the source because the source is not required to be permitted under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 2-4.1 (HAP Major Sources)

This source is not subject to the requirements of 326 IAC 2-4.1 because no single hazardous air pollutant (HAP) emissions exceed 10 tons per year, and the combined HAP emissions are less than 25 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is in one of the listed counties, and has a VOC PTE greater than 10 tons per year.

Pursuant to 326 IAC 2-6:

The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4.

The annual emission statement shall:

(a) indicate the actual emissions of all criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(b) cover the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Local Agency
504 North Broadway, Suite 1012
Gary, Indiana 46402

(c) be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and Gary Local Agency on or before the date it is due.

The submittal by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

326 IAC 5-1-2 (Opacity Limitations)

Opacity shall not exceed an average of 20% in any one 6 minute averaging period. Opacity shall not exceed 60% for more than a cumulative total of fifteen minutes.

Individual State Rule Applicability

326 IAC 6-3 (Process Operations), Paint Booth:

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the paint booth shall not exceed the limits established utilizing the following equation:

$E = 4.10 * P^{0.67}$

where: E = rate of emission in pounds per hour,
P = process weight in tons per hour

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

This paint booth is subject to 326 IAC 8-2-9 because the coatings applied at the booth generate daily VOC emissions greater than 15 pounds, metal parts are coated, the first two digits of the SIC code are 37, and the surface coating operation is not one of the exemptions under 326 IAC 8-2-9(b).

All coatings applied at this source are extreme performance coatings.

The permit condition shall be stated as follows:

Pursuant to 326 IAC 8-2-9, the owner or operator shall limit the volatile organic compound (VOC) content of the extreme performance coatings applied to metal parts and/or products at the paint booth to three and five-tenths (3.5) pounds of VOC per gallon of coating, excluding water, as delivered to the applicator.

For the purposes of this Condition, extreme performance coatings are defined as coatings that are designed for exposure to temperatures consistently above ninety-five degrees Celsius (95° C), detergents, abrasive or scouring agents, solvents, corrosive atmospheres, outdoor weather at all times, or similar environmental conditions.

All solvents sprayed from the application equipment of the paint booth during cleanup or color changes shall be directed into containers. Said containers shall be closed as soon as the solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that minimizes evaporation.
The following calculations determine the as supplied VOC content of the coating applied at this time (extreme performance coating) based on the respective weight percent organics, and respective volume percent water.

lb/gal * wt% organics / (1 - vol% H2O)

Coating	Density lb/gal	wt% Organics	Volume Percent H2O	lb VOC/gal. Less H20
304R3	9.76	0.13	0.55	**2.82**

The VOC content of the “as applied” coating utilized at the proposed coating operation is less than the 326 IAC 8-2-9 extreme performance coating VOC content limit of 3.5 lb/gal, less water. Thus, compliance is determined to e achieved.

Continuous demonstration of compliance with 326 IAC 8-2-9 shall be demonstrated by preparing and keeping copies of the MSDS sheets and “as supplied” and “as applied” VOC data sheets, making them available to the Office of Air Quality upon request.

Conclusion

The proposed surface coating operation shall be constructed and operated pursuant to the requirements specified in Registration **089-15138-00167**.